Filing Date: February 19, 2004

Title: CONTROLLABLE RELEASE OF A VOLATILE SUBSTANCE

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IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (currently amended): A device for releasing a volatile substance into an environment comprising:

- a housing having an interior region, an outer surface, and a[[n]] <u>discharge</u> opening, wherein the housing includes a volatile substance cartridge <u>having an outlet</u> for containing a fluid therewithin;
- means for orienting the device such that gravity forces the volatile substance toward the <u>outlet of the cartridge opening</u>; and
- means for controllably releasing a predetermined amount of the volatile substance from the <u>outlet of the cartridge</u>, <u>transporting it through the housing to the discharge opening</u>, and <u>dispensing it toward</u> and onto an emanator, wherein fluid in the <u>cartridge of the housing</u> is substantially protected from exposure to the outside environment.

Claim 2 (canceled)

Claim 3 (original): The device of claim 1, wherein the housing and the controlled release means isolate the volatile substance from the outside air and substantially prevent loss of the volatile substance until and after a desired release.

Claim 4 (original): The device of claim 1, wherein the housing, controlled release means and emanator can operate with large swings in temperature and pressure of the outside environment.

Claim 5 (withdrawn): The device according to claim 1, wherein the controlled release mean further comprises a rotating manually operable valve for releasing a predetermined amount of fluid on to an emanator to be utilized over time into the surrounding environment.

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Claim 6 (original): The device according to Claim 1, further including means for protecting fluid in the reservoir from exposure to the outside environment.

Claim 7 (original): The device according to claim 1 wherein the controlled release means comprises an electrically operated valve which releases predetermined amounts of the volatile substance to the emanator while isolating the remaining volatile substance in the housing from the outside environment such that there is substantially no loss of volatile substance until the valve is activated.

Claim 8 (currently amended): The device according to claim 1 wherein the device is used in automobiles, vehicles, airplanes, trains and other room spaces where large temperature and pressure swings exist.

Claim 9 (original): The device according to claim 1 wherein the emanator is selected from the group consisting of porous plastic, cellulose pads, porous glass, ceramic pads, heated pads, piezo electric pads or ultrasonic pads, fans and combinations thereof.

Claim 10 (original): The device according to claim 1 wherein the housing is constructed of a substantially rigid material having means for allowing air to fill the space when a predetermined amount of volatile substance controllably leaves the reservoir.

Claim 11 (withdrawn): The device according to claim 1 wherein the housing comprises a flexible material

Claim 12 (original): The device according to claim 1 wherein the volatile substance is selected from the group comprising fragrances, medicaments, insect repellants, cleaning chemicals and combination thereof.

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Claim 13 (original): The device according to claim 1 wherein the controller comprises a frame with a shuttle inside, the shuttle having a chamber with and a plurality of seals surrounding the shuttle, and a spring in contact with the shuttle for movement.

Claim 14 (currently amended): The device according to claim 13 [[1]] wherein the shuttle has a chamber for delivering a predetermined dose of the volatile substance to a discharge opening hole within the frame.

Claim 15 (withdrawn): The device according to claim 1wherein the controller comprises a rotating pin.

Claim 16 (withdrawn): The device according to claim 15 wherein the rotating pin includes mechanical stops.

Claim 17 (withdrawn): The device according to claim 15 wherein the rotating pin has a spring return.

Claim 18 (original): The device according to claim 1 wherein the emanator further comprises a surface to receive the fluid, the surface being an absorbent pad.

Claim 19 (original): The device according to claim 1 wherein the emanator further comprises a surface to receive the fluid, the surface being a hard surface.

Claim 20 (original): The device according to claim 1 wherein the emanator is associated with a heating element for increasing volatilization.

Claim 21 (original): The device according to claim 1 further comprising means for increasing airflow adjacent the emanator.

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Claim 22 (currently amended): The device according to claim 1, wherein the cartridge is replaceable.

Claim 23 (original): The device according to claim 1, wherein the cartridge is refillable.

Claim 24 (currently amended): A method of releasing a volatile substance into an outside environment comprising the steps of:

- storing a volatile substance in a reservoir;
- releasing a fixed dose of the volatile substance from the reservoir by a controller, and the controller sealing the volatile substance from the outside environment using the controller, and driving the volatile substance to until release[[d]] through a discharge opening; and
- collecting the fixed dose and vaporizing the fixed dose of the volatile substance into the outside environment by an emanator, the emanator positioned below the reservoir.

Claim 25 (original): The method of claim 24, wherein the step of releasing comprises the step of activating the controller from a first position to a fluid releasing position while preventing loss of the volatile substance until and after a desired release.

Claim 26 (original): The method of claim 24, wherein the step of activating is selected from the steps of manually or electronically activating.